

A national strategy for management of the Service's scientific data

Data Management Subcommittee
of the Science Committee

Emily Silverman
19 June 2014

USFWS Science Committee

Created to help promote science excellence in the Service.

Members are not programmatic or Regional representatives, but serve as individual scientists.

- Science Awards
- FWS Journals & Publishing disclaimer
- Procedures for permission to serve on Boards
- Scientific integrity and ethics
- Science capacity

Spring 2012

Science Committee forms *ad hoc* Subcommittee
to address recurring data management-related issues

The Science Committee's *ad hoc* Subcommittee on Data Management developed a Vision, a Strategy, and set of recommended Actions.

Joel H. Reynolds*

Emily Silverman*

Kelly Chadbourne

Sean Finn

Rick Kearney

Kaylene Keller

Chris Lett

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Kristin Shears

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Western Alaska LCC

Migratory Birds

R5 NWRS I&M

Great Northern LCC

R8 OSA

R8 NWRS I&M

IRTM Data & Systems Services

R6 NWRS I&M

Div. Cost & Perf. Management

Ecological Services, ECOS Program

Special thanks to Jen Jones (NCTC)

*Science Committee Member

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August 2013

OSA briefs Directorate on
Data Management
problems and work of
Subcommittee



**DIRECTORATE REQUESTS A PROPOSAL
WITH RECOMMENDED INITIAL ACTIONS**

Fall-winter 2013-14

Subcommittee drafts *Strategy for managing
FWS scientific data*

Vision

*Scientific data are 'trust resources'
and the foundation of
our future conservation actions*

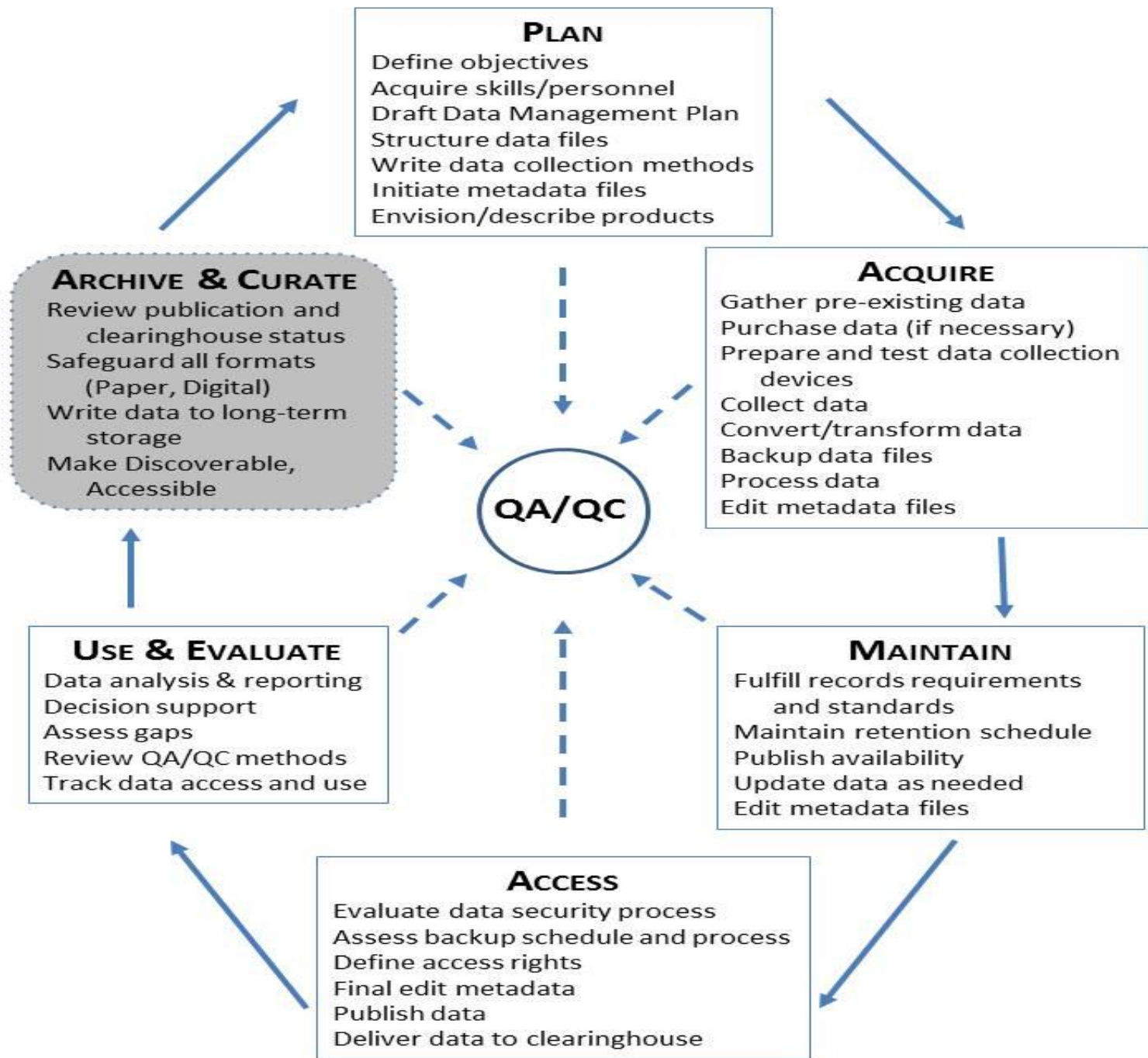
Key Aspects of the Problem

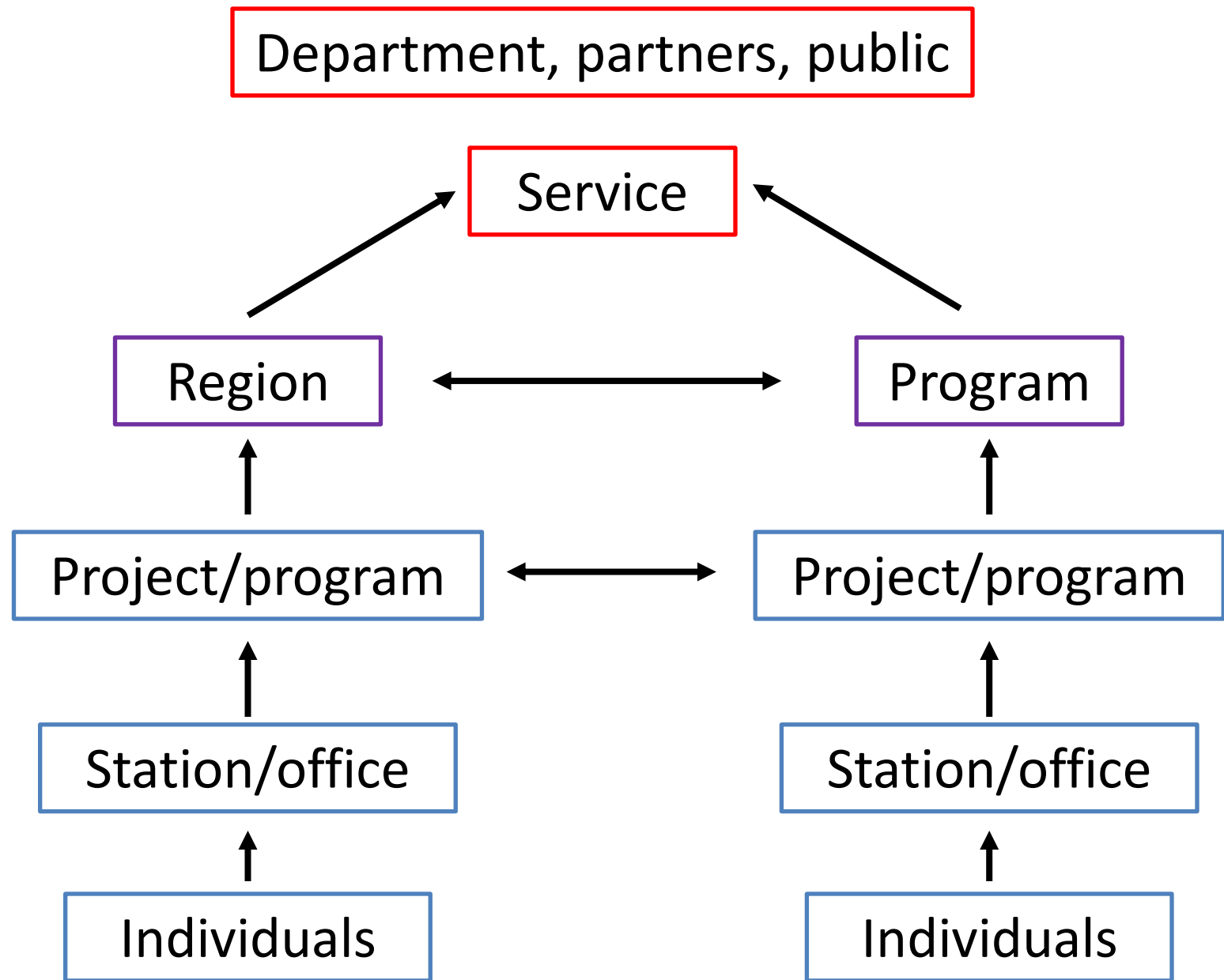
Long-term data curation

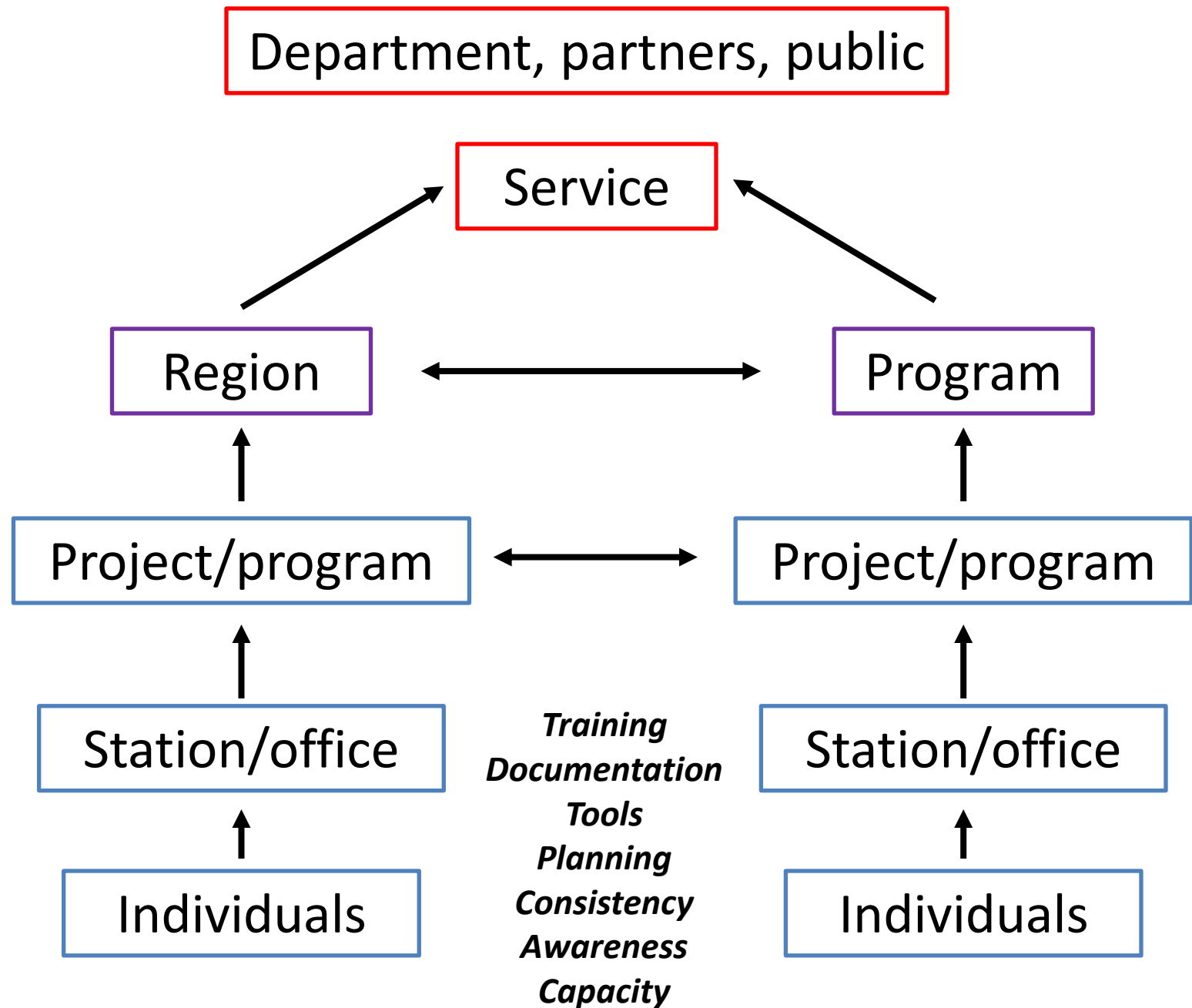
Project-level data stewardship

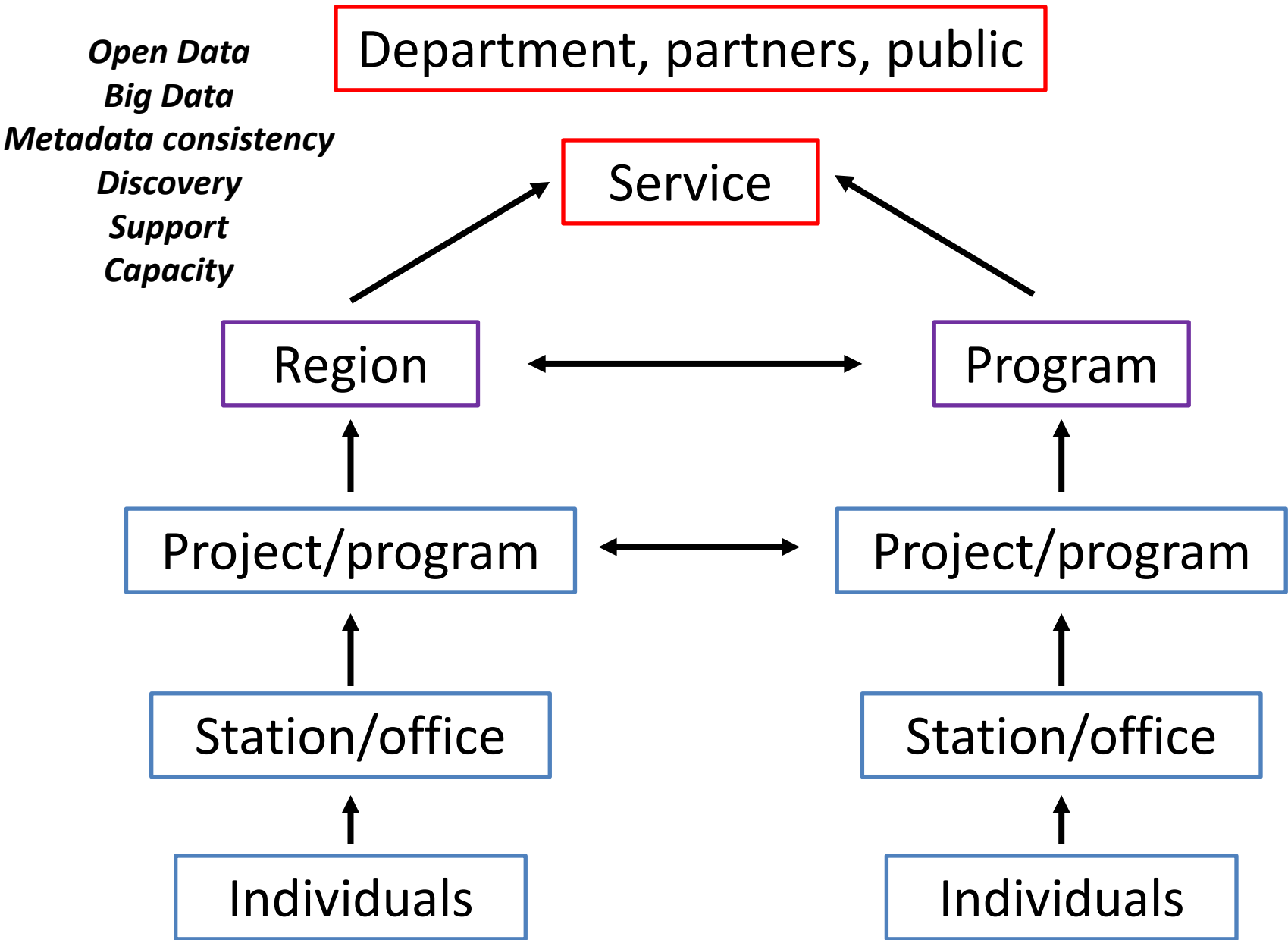
Occurs at the *source* of data collection
Requires understanding of data *content*

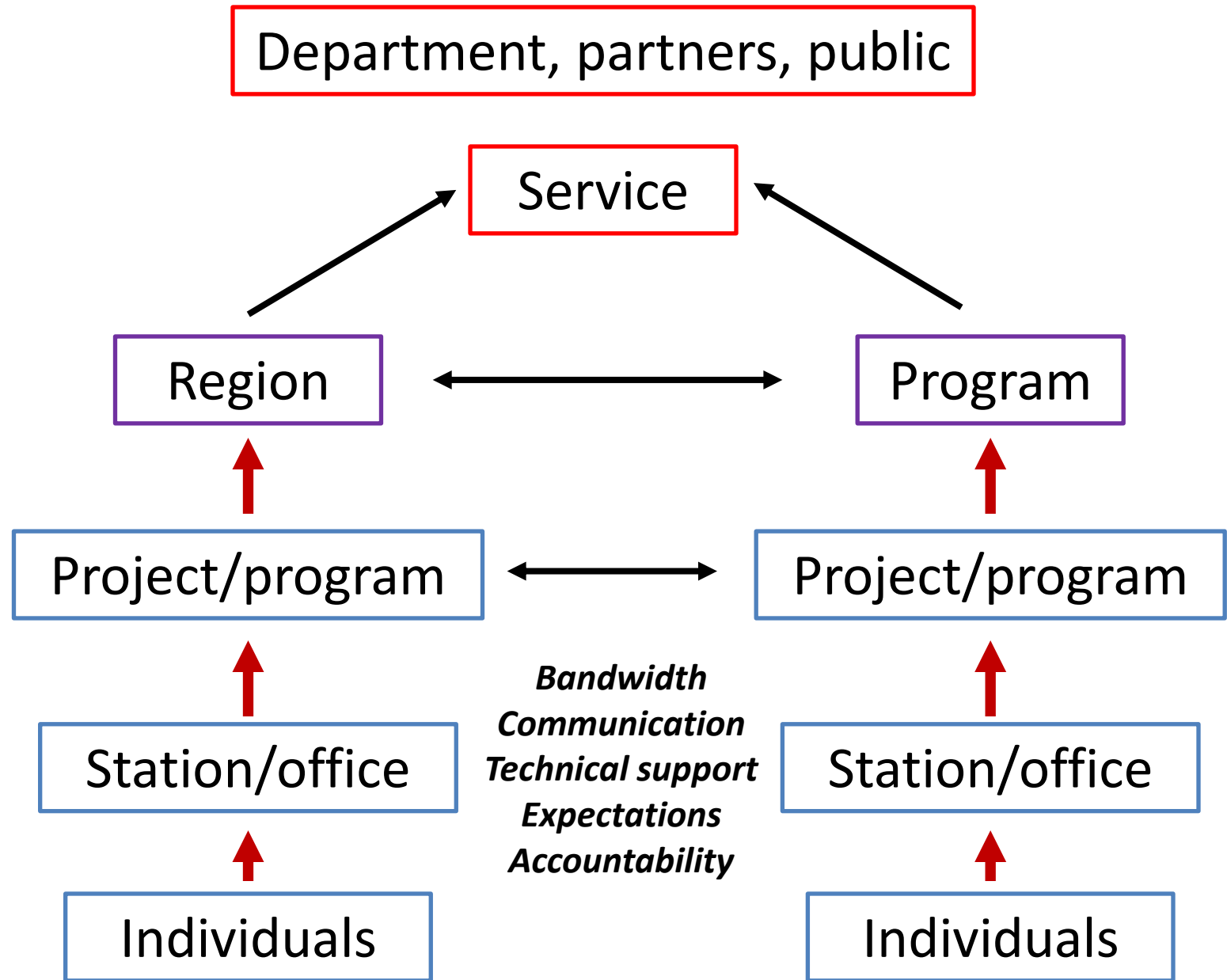
Regional/National scale
Best point of access for OPEN DATA
IT infrastructure is critical

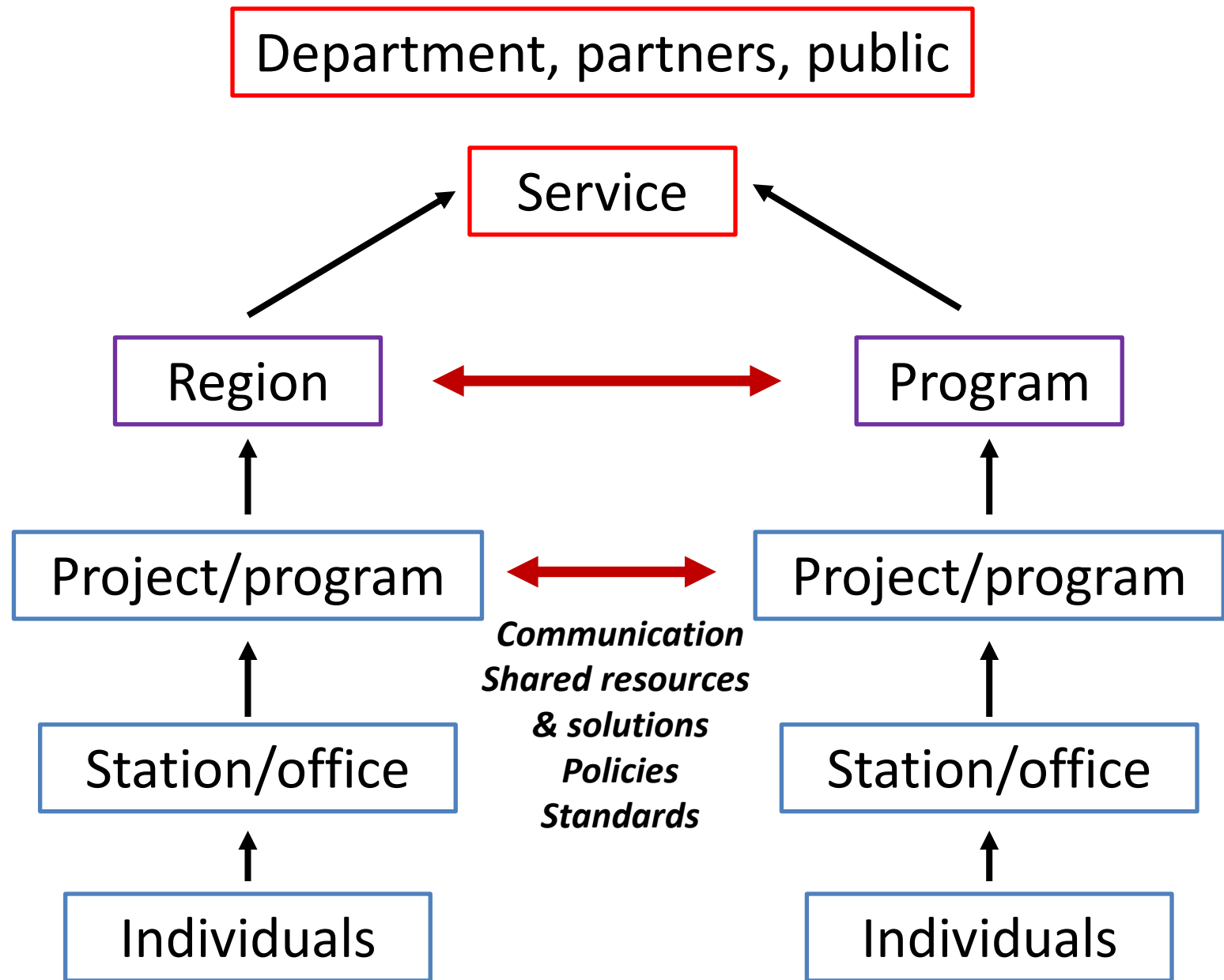


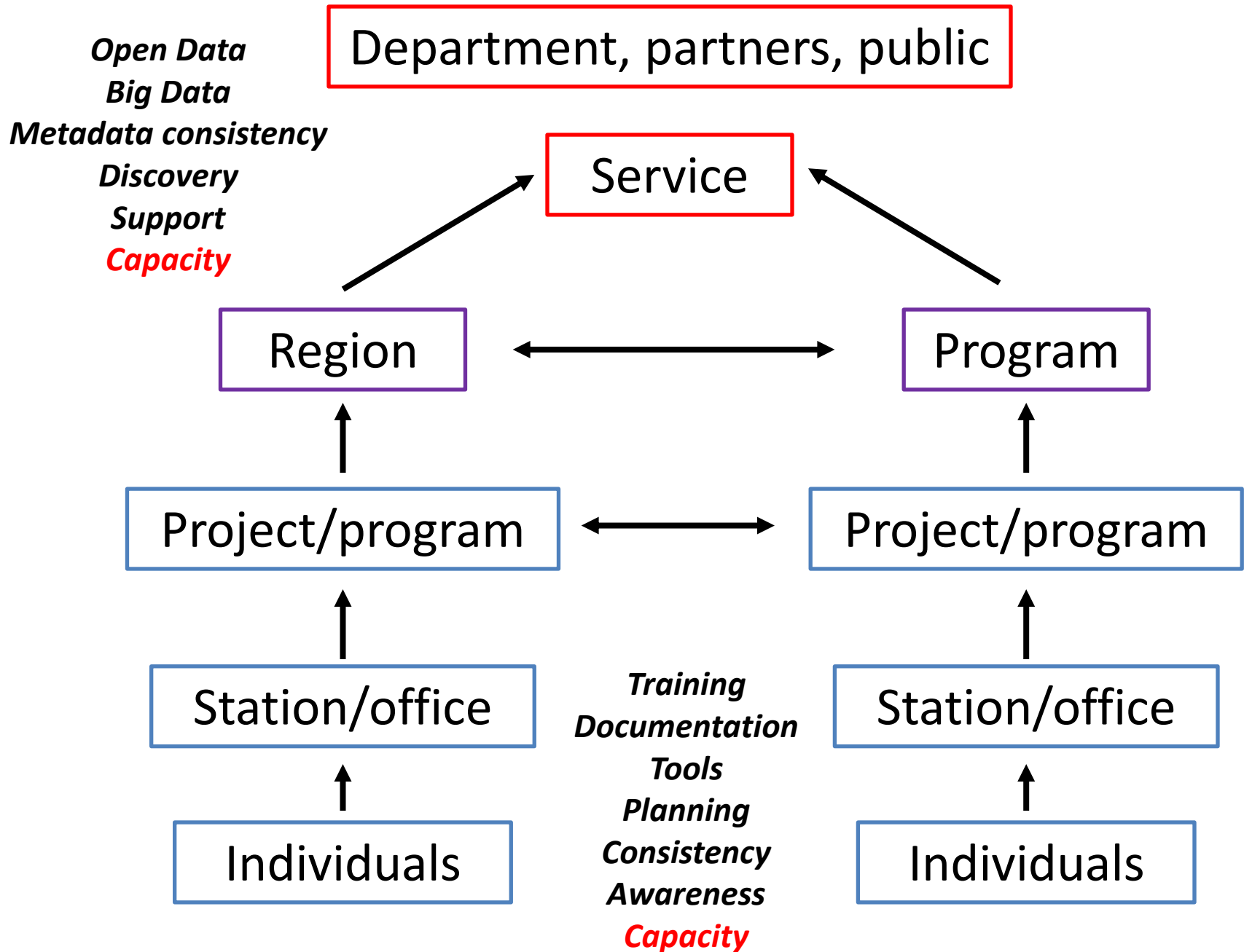


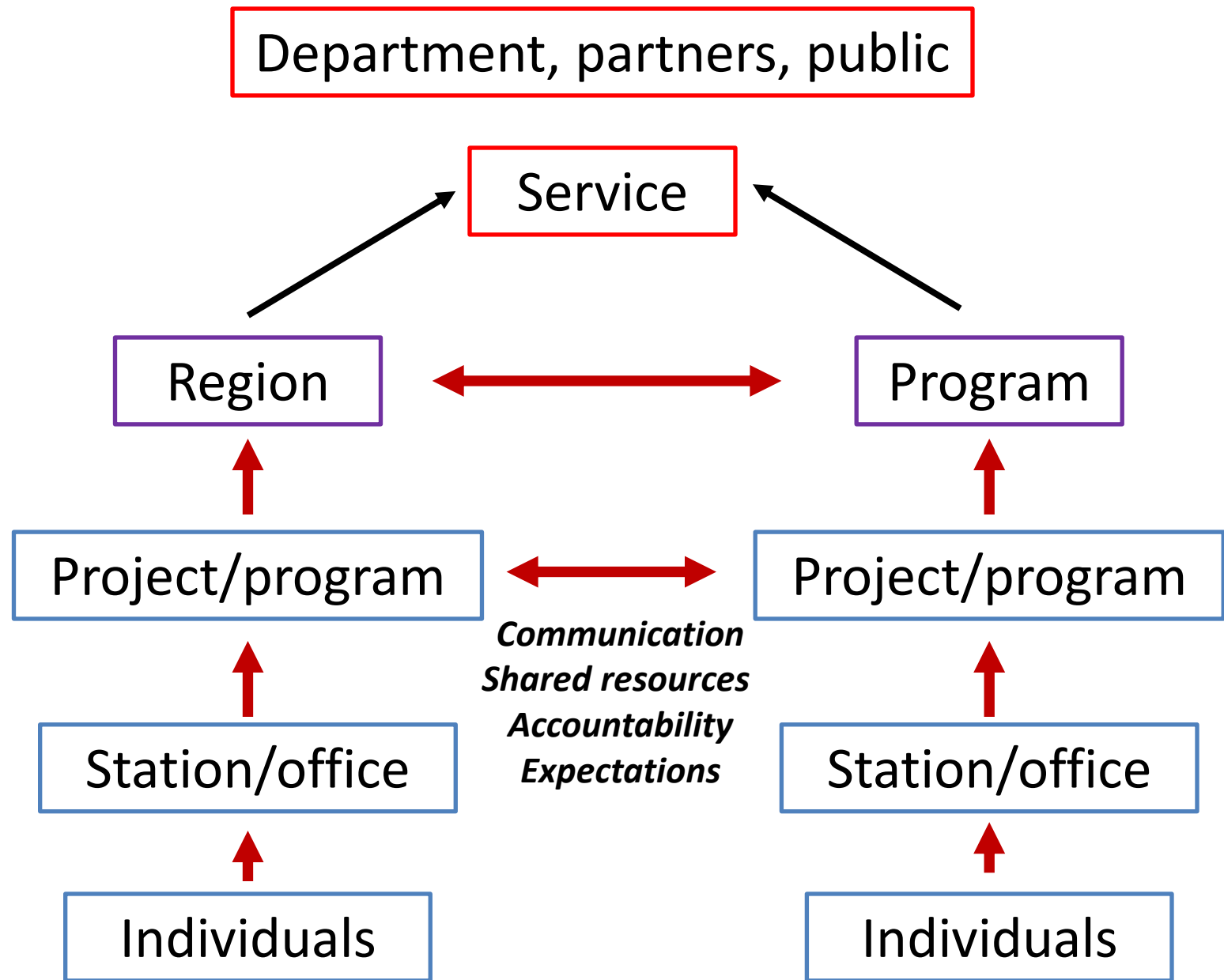












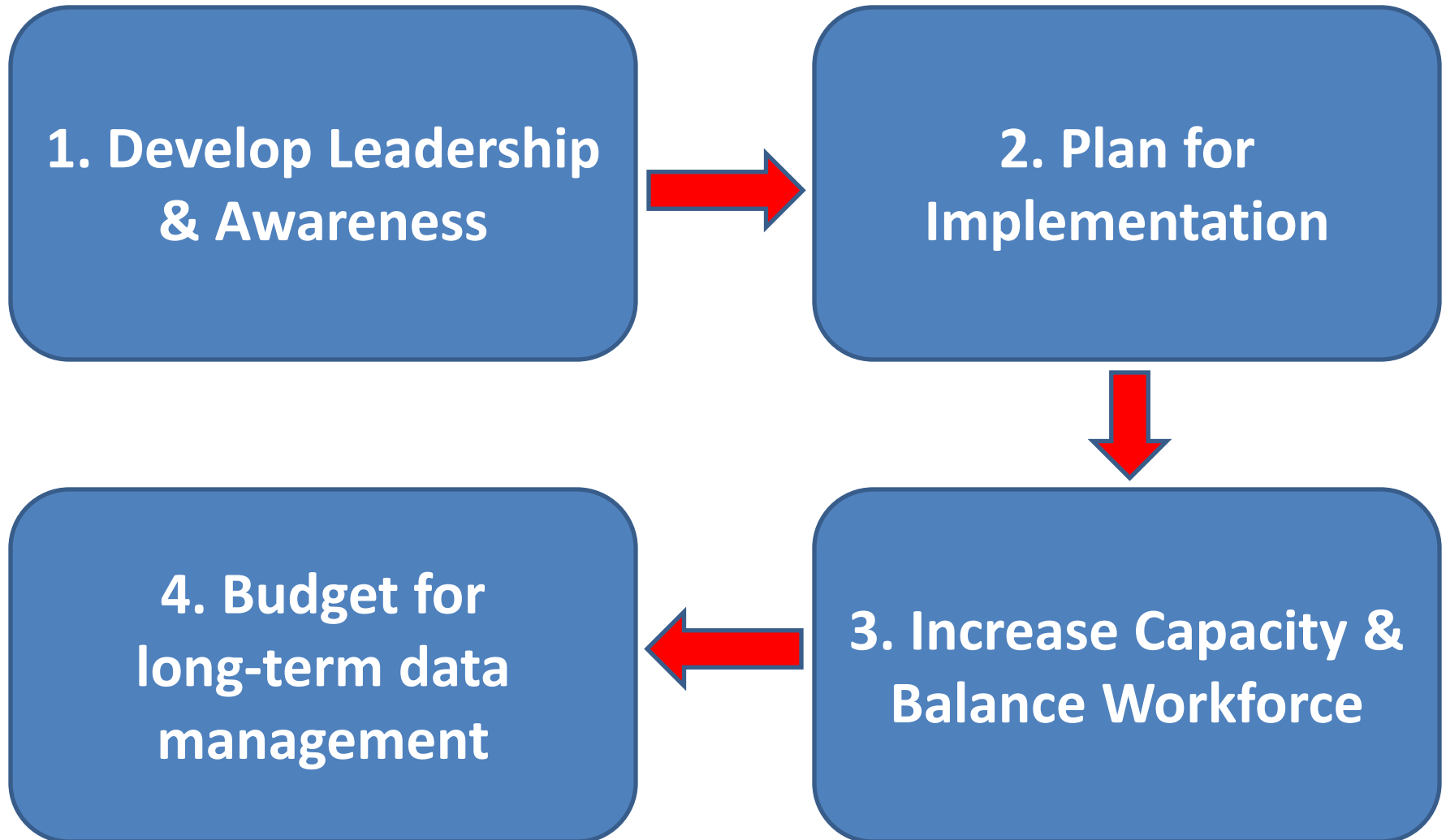
There are **Cultural, Organizational, and Resource** challenges to overcome.

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Any solution must have 4 characteristics:

1. Meet distinct project-level, Regional, and National needs;
2. Connect local, Regional, and national systems;
3. Coordinate between and within Regions and Programs;
4. Recognize that the transformation will take time and requires a phased approach.

Strategic Directions



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April 2014

Presentation to Directorate
of key strategy messages
and recommended initial
actions

Action 1

Develop leadership: Create home & voice for data science

National **Data Science Advisor**

Service-wide standing **Data Science Committee**

A Community of Practice with participation by early adopting **Data Science champions**

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Communication

Collaboration

Accountability

A language and culture focused on data value

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Action 2

Plan nationally: Contract a comprehensive evaluation of the Service's data management practices & needs

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Where are the current data science resources?

How much money do we spend?

What are measurable improvements?

What can we share? Where do we invest first?

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Action 2

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Action 3

Increase local capacity: Initiate a 3-yr term award to develop local project-level capacity

How could this effort benefit the GIS community?

- magnify your voice re: needs, e.g. improved standardization
- promote your solutions
- develop relevant policies, e.g. Open Data implementation
- improve availability of Service data
- increase cross-Service technical & science capacity
- improve data literacy & training across workforce
- improve communication between IT and science activities.

What's next?

The Strategy provides a vision and broad set of goals.

(*WHAT*)

Initial actions aim to create a mechanism for implementation.

(*WHO*)

Need:

Promotion of the strategy's principles: cultural + organizational change and increased resources for data science.

Engagement with implementation planning. **(*HOW*)**

Decision Document for Directorate

Request that Directorate creates a
Data Science Committee

This committee will be charged with developing

- a position description for a Data Science Advisor, and
- a process for a detailed data management evaluation.

It will

- continue the work of *ad hoc* Data Management Advisory Committee, and
- implement the rest of Strategy recommendations.